

CLAIMS

1. A method of making a titanium golf club head comprising the steps of:
 - a. putting a semi-finished club head into a mold, the semi-finished club head comprising the parts of: a striking face, sole, crown, and shaft;
 - 5 b. molding the parts together in a sonic stove;
 - c. forging the parts in a forging machine;
 - d. processing the surface of the club head.
2. The method in claim 1 wherein the forging temperature is 920 degrees Celsius when using Ti-6-4 as forging material.
- 10 3. The method in claim 1 wherein the reacting speed is in the range from .1s to .001s.
5. A method of making a titanium golf club head comprising the steps of:
 - a. adopting Titanium alloy as SPDF material under isothermal forging conditions,
 - b. putting semi-finished workpieces including a striking face, sole, crown, and shaft into a mold,
 - 15 c. setting the SPDF temperature at between 870-970 degrees Celsius, while heating the mold and workpieces simultaneously in a high frequency stove,
 - d. moving the mold and workpieces from the stove to the forging machine,
 - e. adjusting the forging machine reacting speed rate within the range of $10^{-2}/s$ to $10^{-4}/s$.
- 20 6. The method of claim 4 wherein the thickness of the club sole varies from 1.0 mm to 1.3 mm, wherein the crown section has relatively uniform thickness.
7. The method in claim 4 wherein the forging temperature is about 920 degrees Celsius when using Ti-6-4 as forging material.
8. The method in claim 4 wherein the reacting speed is in the range from .2s to .002s.
- 25 9. The method in claim 4 wherein the titanium is Ti-4-6.